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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,027	09/11/2003	Jonathon Y. Simmons	008444 USA/AGS/IBSS	6774

7590 09/10/2004

Patent Counsel
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EXAMINER	
SOUW, BERNARD E	

ART UNIT	PAPER NUMBER
2881	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/661,027	SIMMONS ET AL.	
	Examiner	Art Unit	
	Bernard E Souw	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6-18* is/are allowed.

6)☒ Claim(s) *1,2,4 and 5* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/6/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Trueira (USPAT 5,420,415).

Trueira discloses an ion implanter electrode component shown in Fig.3 and 4 for use in an ion implanter having an electrically conductive electrode support frame and adapted to generate an ion beam, comprising:

an electrically conductive insert member 72-73-74 shown in Fig.11A,B,C adapted to be inserted into said ion implanter support frame 90 shown and/or support frame 80 shown in Fig.4 and recited in col.6/ll.6-10, said insert member comprising an electrode

body portion 72 defining an aperture 78, said insert member further comprising a plurality of alignment pins 122 shown in Fig.7A,B and Fig.8A,B, as recited in col.8/ll.9-12, the alignment pins 122 positioned to engage said ion implanter support frame 90 and to align said aperture 78 in an aligned position relative to said ion implanter support frame 90, wherein said electrode body portion 72 is positioned to receive said ion beam passing through said aperture 78, said insert member further comprising a plurality of retention flanges 98 and 81 shown in Fig.4 and Fig.3, respectively, as recited in col.7/ll.15-17 and col.6/ll.15-19, respectively, the retention flanges 98 and 81 adapted to engage said ion implanter support frame 98 and/or 80 and to retain said electrode body portion 72 in said aligned position within said ion implanter support frame 98 and/or 80 and electrically coupled to said support frame 90, as recited in col.8/ll.4-15 and col.5/ll.51-67 + col.6/ll.1-5.

► Regarding claim 2, each of Trueira's alignment pins 122 has a cylindrical pin body portion which defines a cylindrical outer surface adapted to engage said ion implanter support frame 90 or 80, as shown in Fig.8A and recited in col.8/ll.4-22.

► Regarding claim 4, Trueira's alignment pins 122, retention flange 98 shown in Fig.4 or retention flange 81 in Fig.3, and the electrode body portion 72 are integrally formed, wherein the insert member 72 is a one-piece member, as implicated in col.6/ll.25-68 and col.7/ll.1-58.

► Regarding claim 5, Trueira's support frame 80 shown in Fig.3 has a flat face portion 74 and 73 and said insert member 72 has a flat face portion as shown in Fig.11B, and wherein said insert member flat face portion is positioned engaged face to

face with said support frame flat face portion 73 and 74 in said aligned and retained position, as shown in Fig.11A,B,C and recited in col.5/ll.51-68.

Indication of Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Indication of Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter (claim 3):

An ion implanter electrode component for use in an ion implanter having an electrically conductive electrode support frame and adapted to generate an ion beam, comprising an electrically conductive insert member adapted to be inserted into said ion implanter support frame, said insert member comprising an electrode body portion defining an aperture and a plurality of alignment pins positioned to engage said ion implanter support frame and to align said aperture in an aligned position relative to said ion implanter support frame, wherein each alignment pin has a pin body portion and a retention cap having a width wider than the width of said pin body portion wherein each alignment pin retention cap defines a retention flange, has neither been anticipated nor rendered obvious by any prior art.

Allowed claims

6. Claims 6-18 are allowed.

Reasons for Allowance

7. An ion implanter electrode for use in an ion implanter having an electrically conductive electrode support frame, comprising an electrically conductive insert member adapted to be inserted into said ion implanter support frame, said insert member further comprising a first alignment pin positioned to engage said ion implanter support frame groove-shaped first alignment surface, and a second alignment pin positioned to engage said ion implanter support frame second alignment surface to align said aperture in an aligned position relative to said ion implanter support frame, as recited in claim 6, has neither been anticipated nor rendered obvious by any prior art.

8. Claim 18 is allowed for reciting an ion implanter electrode for use in an ion implanter having an electrically conductive electrode support frame, comprising an electrically conductive insert member adapted to be inserted into said ion implanter support frame, said insert member further comprising a plurality of alignment pins, wherein each alignment pin has a cylindrical pin body portion and a retention cap having a width wider than the width of said pin body portion, and wherein the support frame has a flat face and said insert member has a flat face portion, and wherein said insert member flat face portion is positioned engaged face to face with said support frame flat face portion in said aligned and retained position.

9. Claim 12 is allowed for reciting a method of assembling an ion implanter electrode for use in an ion implanter adapted to generate an ion beam, comprising steps of inserting an electrically conductive insert member into an electrically conductive electrode support frame which defines an aperture having first and second alignment surfaces, wherein said first alignment surface is groove-shaped, and wherein said insert member comprises an electrode body portion defining an aperture; the steps further comprising engaging a first alignment pin of said insert member with said ion implanter support frame groove-shaped first alignment surface; engaging a second alignment pin of said insert member with said ion implanter support frame second alignment surface to align said insert member aperture in an aligned position relative to said ion implanter support frame, wherein said electrode body portion is positioned to receive said ion beam passing through the aperture; and engaging a plurality of retention flanges of said insert member with said ion implanter support frame to retain said electrode body portion in the aligned position.

10. Claims 7-11 and 13-17 are also allowed for their dependency, either directly or indirectly, to claims 6 or claim 12.

Communications

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272

2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes
September 7, 2004

JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800